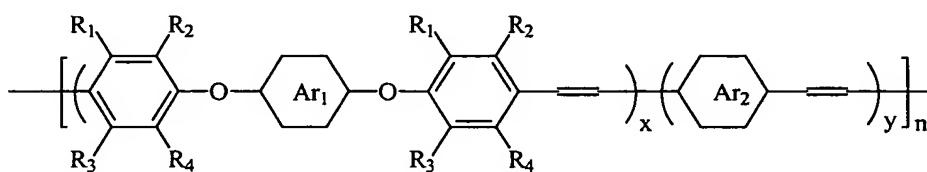


Abstract

This invention relates to an energy-transfer type light-emitting polymers based on poly(p-phenylene vinylene)s containing two or more kinds of luminous elements which are completely isolated by an ether group in the backbone, having the following structural formula. The conjugated length of each kind of luminous element can be adjusted and different luminous elements can be effectively isolated by an ether bond as a linking element and an isolating element. Meanwhile, different luminous elements can independently emit, which provides the precondition of energy transfer between different luminous elements in relation to molecular structure and therefore the fluorescence quantum efficiency can be improved.



wherein $Ar_1, Ar_2, R_1, R_2, R_3, R_4, x$ and y are defined as in claims.